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## In the Claims:

Cancel Claims 1-10, and insert therefor new Claims 11-20, to read as follows:



- 11. A process for the production of a printed substrate, comprising the steps of:
- (i) imagewise applying to a substrate a printing paste comprising:
  - (1) a matrix-forming condensate comprising polyorganosiloxanes, prepared by a sol-gel process, and
  - (2) at least one filler selected from the group consisting of coloring, luminescent, conductive, and catalytically active fillers; and
- (ii) densifying the imagewise-applied paste to form the matrix containing the at least one filler by heat treatment at a temperature below the glass transition temperature of the thus-formed matrix.
- 12. The process of claim 11 where the step of densifying comprises heat treatment at a temperature that is at least 200 °C below the glass transition temperature of the thus-formed matrix.
- 13. The process of claim 11 where the step of imagewise applying the printing paste comprises screen printing or pad printing.
- 14. The process of claim 11 where the substrate is a glass substrate, a glass-ceramic substrate, or a ceramic substrate, any of which optionally has been provided with a conductive coating.
- 15. The process of claim 11 where the printed substrate is a substrate printed with conductor tracks, spacers, or a decorative pattern.

- 16. A composition comprising:
- (a) a matrix-forming condensate comprising polyorganosiloxanes, prepared by a sol-gel process comprising partial hydrolysis and polycondensation of:
  - (A) at least one organosilane of the formula  $R_n SiX_{(4-n)}$ , where each R is independently a non-hydrolyzable radical, each X is independently a hydrolyzable group or a hydroxy group, and n is 1, 2, or 3; or an oligomer derived therefrom,
  - (B) optionally, at least one hydrolyzable silane of the formula  $SiX_4$ , where each X is as defined above, and
  - (C) optionally, one or more compounds of glass-forming elements;
- (b) at least one filler selected from the group consisting of coloring, luminescent, conductive, and catalytically active fillers;
- (c) at least one organic solvent having a boiling point of at least 150  $^{\circ}\text{C};$  and
- (d) at least one rheology control agent.
- 17. The composition of claim 16 where the organosilane (A) comprises at least 40 mol% of the components (A) through (C) forming the condensate.
- 18. The composition of claim 16 where a filler is present and is selected from the group consisting of dyes, colored pigments, photoluminescent substances, electroluminescent substances, electrically conductive materials, photoconductive materials, and catalytically active fillers.

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